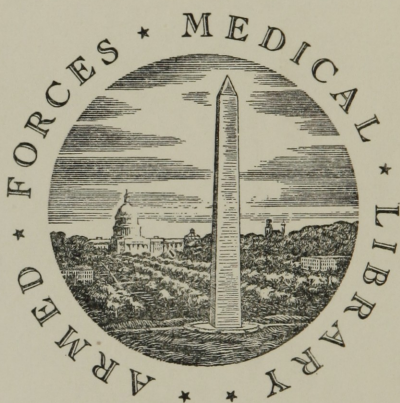


UNITED STATES OF AMERICA



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WASHINGTON, D.C.

AN

Lacustrine Association.

INTERESTING

A C C O U N T

OF

THE PLAGUE, YELLOW FEVER, &c.

AS THEY HAVE PREVAILED IN DIFFERENT COUNTRIES.

Printed at the Request of the Boston Board of Health.



BOSTON:

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1820.

HEALTH OFFICE, BOSTON, APRIL 24, 1820.

An interesting Communication, on the subjects of the Plague and Yellow Fever, having been made to this Board *in the form of an Address to the Legislature of Louisiana*,—And the Board having considered the same, and being of opinion that much useful information is contained in said Address,—Voted, That the subject of a Communication on Fevers, Plague, &c. be committed to Messrs. Whitman, Holmes and Otis for printing.

TO THE

LEGISLATURE

OF

LOUISIANA.

THE Governor of the State, I perceive, has called your attention to a Quarantine Law : what measure may be reported by the joint committee appointed on that part of the message, remains yet undecided. That the committee and your honourable body will be disposed to adopt any measures, calculated to check the calamity by which we have been visited, on two recent occasions, there can be no doubt.

If on inquiry, it shall appear, that the want of some regulations, prohibiting its importation amongst us, has the effect of its creation and propagation, it is hoped that no considerations of commerce or economy will prevent the legislature from interfering. For I hold that the life of our citizens is the primary object of your care, and that no embarrassments which can be imposed upon trade will counterbalance the loss of one valuable citizen. If doubts should exist in your honourable body as to the efficacy of quarantine laws, the experiment should be made. Whatever may be thought of its being *contagious* or not, no considerations of inconvenience can be put in competition with the probable irreparable mischief: the inefficacy of the present law is sufficiently exposed in his excellency's communication. The effect of its existence upon the future prosperity of the state and of this city particularly is visible, in the vast portion of fertile and uncultivated land which we have, and the slow increase of the population of our city, which under other circumstances, its geographical position and commercial advantages would induce.

The want of a medical education will prevent my taking any part in the question, which has created so much dispute in the medical world, and which has divided the profession as well in the eastern as the western hemisphere. I shall content myself

with collecting the proofs and facts of others.—I fully agree with an eminent gentleman of the faculty, of New-York, (and of whose *observations* I shall make free use on this occasion,) that it appears to be a dispute more about *words* than *facts*: whether the yellow fever be *contagious* or *infectious*, or either, I shall not pretend to decide—whether it be of domestic or foreign origin, I deem equally immaterial to the present question; that it arises from both sources, I feel perfectly assured. In the character of our climate, the face of the country, and the police of our city, I see abundant sources for the former; that it is sometimes propagated by the latter, and that its origin in this city, on more than one occasion, may be traced to this source, I propose to shew by facts which have occurred, some within my own observation, and others upon the information of persons to be relied on.

It will not be supposed, that I ascribe to the quarantine law the magical effect of exempting us altogether from yellow fever; the effect would be merely to cut off one source of the disease; the causes are no doubt frequently sufficient for its origin, sometimes, however, they may not reach this point of malignity, and the impurities of the atmosphere must combine with the specific poison to create it. Throughout the southern country, and more particularly the Delta of the Mississippi, we are subject to highly bilious inflammatory fevers. Where this grade of fever ends, and a higher stage, that of yellow fever commences, like murder and manslaughter, it may be difficult to determine.—Last Autumn, 1819, I believe the atmosphere was sufficiently impure to have generated the disease, and indeed there are abundant evidences of such effect, in remote and secluded parts of the country, where the victims of fever had no intercourse to create a suspicion of foreign contagion. The atmosphere is the medium through which the *specific poison* is communicated—and a certain degree of *impurity* is necessary to make it answer the conducting purpose. That I may not be misunderstood, I will put the illustration of the author whom I have before quoted—I will suppose A to be ill of fever, attended with a peculiar train of symptoms; he is in a small confined apartment, his person is neglected, the atmosphere around him is rendered impure and offensive; under these circumstances, B visits him, and a few days after is also taken sick with the same disease, attended in all respects with the same dangerous symptoms, which characterized the disorder of A; well might Dr. Bailey consider the disease of B to proceed from something emanating or secreted from the body of A communicated by the *impurities of the chamber*; thus it is with the action of yellow fever of foreign origin upon the frequent impure atmosphere of our city. It may well be inquired whether there would be the same hazard, in visiting a chamber equally filthy, where C lies ill of a broken limb? the disease of B may well therefore be ascribed to something more, than the impure air of the chamber of A.

It may be ascribed to a peculiar *virus* generated in his system by the disease under which he labours, and communicated by his excretions to the surrounding atmosphere, rendering it thus capable of producing the same disease, in those who may be exposed to its influence.

We will readily admit that the yellow fever is a contagious or communicable disease, in an impure atmosphere, but not generally so, where the air is preserved pure and free from noxious materials; this should lead to a system of police regulations, which will best insure us against its ravages, when introduced.

I shall proceed to shew from the most approved writers, and from the facts as they have occurred in New-Orleans, that the yellow fever is governed by a law peculiar to itself, that it is communicable or contagious in a foul atmosphere, but that it is never or rarely so, in a *pure air*, where the sick enjoy ventilation and cleanliness, and that the same subjects are never or rarely obnoxious to a second attack of it. It is correctly observed by a medical writer, that the plague which may be associated with it, is only communicable through the medium of a like atmosphere, and this will be found to be verified by every writer on the subject. An eminent French surgeon (Larrie) is of opinion, it can be communicated only by contact. The plague of Athens, the first of which we have any satisfactory or authentic account, furnishes evidences of its propagation. Whether the disease originated in the city of Athens, or was introduced from Ethiopia, the fact is established, that the circumstances under which it appeared in that city were peculiarly favourable to its diffusion. It appeared according to Thucydides in the beginning of the summer season, at a time when the city was so crowded with those who had fled thither from the neighbouring country of Attica, from the invading armies of the Peloponnesians and their allies, that many were forced to lodge themselves within the turrets of the walls, or wherever they could find a vacant corner. The city, says the historian, was not able to "receive so large a conflux of people." The same historian adds, "the pestilence destroyed with the utmost disorder, so that they lay together in heaps, the dying upon the dead." He also observes, that it "ragged the most and for the longest time in Athens, but afterwards spread into the other towns." We are also told that at the siege of Potidea, which took place about the same time, the plague followed them even thither, and destroyed the army; that those who had been there previously, caught the infection from the troops brought from Athens.

The circumstances attending the plague as it appeared at different times at Rome, are no less demonstrative of the truth, that an impure atmosphere was the vehicle or medium through which it was propagated. The plague which occurred in the 5th century of Rome, says Livy, was communicated in like manner, and was most malignant from the crowds who fled to Rome for safety, from the ravages of the enemy. Dionysius of Hali-

carnassus mentions another period, when the disease seized studs of mares, herds of oxen, and flocks of sheep, and was communicated in the same manner to the most distant parts of the empire.

The history of the pestilence of modern times, the accounts of which are more minutely and satisfactorily detailed, no less proves that the plague as well as yellow fever, when once introduced, spreads its devastation by means of a vitiated atmosphere.—Accordingly the plague of 1665 in London was almost entirely confined to the poor, who were crowded in small dirty apartments.

The rich, says Mr. Howard, are less liable to the disease than the poor; from whence originated the custom in Italy and France, when the plague appeared, to drive out the poor immediately; so fully were the magistrates convinced that the disease was preserved and propagated by them. Upon the same principle, when it appeared at Marseilles, beggars were ordered to quit the town.

Lord Clarendon, in the history of his own life, relates that the plague of London was chiefly confined to the poor; that on his return to town, he missed but few of his acquaintances, and that the city of Oxford, to which the parliament had removed, remained uninfected, which exemption is ascribed by Dr. Plott to the *draining* and greater *cleanliness* of that city.

The great plague with which Marseilles was visited in 1720, presents us with a detail of facts that lead to the same conclusion. This disease, it is well ascertained, was introduced from the Levant by a ship which arrived at Marseilles, from the coast of Syria. It appeared first amongst the sailors of the suspected ship, it was next taken by the porters engaged in opening the merchandize at the lazaretto, it was then introduced into the city and spread amongst the poor. Bertrand says it was attempted to destroy it by kindling fires, which, he adds, appeared to re-lume that of the contagion: they heated the air, already rendered suffocating by the heat of the season and climate, the pestilential poison became more active, and the disease acquired new force.

The plague of Aleppo in 1761, 62 and 63, might also be cited upon this occasion, to shew that the epidemic influence of this disease is chiefly dependent upon the atmosphere, in which it may be introduced. The circumstances of the plague which afflicted the British and French troops in Egypt, in 1801, will shew also that this disease is contagious, in a peculiar manner dependent upon the state of the atmosphere, which is the powerful agent to put the contagion into action and to give it its full force.

This principle derives support from the fact that dysenteries even, are sometimes derived not from the noxious qualities of the atmosphere alone, but from the contagion communicated through that vitiated medium. Sir John Pringle remarks, that

the dysentery that occurred at Dettingen, in 1743, in the British army, was first taken by regiments which had been much exposed to rain, and suffered for the want of proper diet; it was afterwards communicated generally to such regiments as had not been exposed to the predisposing causes: and to shew that this disease is dependent upon the dysenteric taint which is communicated to the atmosphere, he observes of the epidemic which raged at Nimiguen, in 1736, that none of the neighbouring towns suffered, unless by their communication with the place infected.

The facts which have been ascertained relative to yellow fever, furnish no less conclusive evidence, that this disease, like those already noticed, is, or is not generally contagious, depending on the qualities of the air to which it may be communicated. The history of every visitation of this disease in the United States, establishes this truth. It has not only regularly made its first appearance in our seaport towns, and in those places where the air is most impure, at that season of the year, when those impurities acquire the greatest virulence, in those houses which are most crowded with inhabitants; but wherever the same disease has been conveyed to other parts of the same city or town or in the country, it either was propagated or extinguished according to the local circumstances of the place to which it was so conveyed.

I shall proceed to verify this position from the facts of the disease, as it has appeared at different periods on the Mississippi, and particularly in this city. In 1817, a vessel from the Havana (the *Virgin del mar*,) arrived in the river. Mr. Helms, a custom-house officer, was sent to visit her by the collector of the port: on his arrival he understood the crew were sickly, and that several of them had died; he remained constantly on board, and the rain compelled him to pass two nights in the cabin of the vessel. On his return to town, he complained of sickness, sent for Doct. Alexander, and expressed his apprehensions that he had taken the yellow fever. Doct. Kerr was afterwards called in, who confirmed the suspicions of the patient, of his having a decided attack of the yellow fever. With the most praiseworthy and benevolent intentions, Dr. Kerr made the circumstance public, for which he was reproached for raising an *unnecessary alarm*, and statements were published of his having but a common intermittent fever: unfortunately for the truth of those statements, and for the revenue department, Major Helms died with the *black vomit*, within two days after their publication.

Very shortly after the death of Major Helms, Doct. Alexander, who had attended him with great diligence, had a violent attack of the same disease, but fortunately survived it. It may be further observed, that Doct. Alexander during his sickness was removed to the house of a friend in the fauxbourg of St. Marie, who with all his household caught the disease from him. Doct.

Davidson who attended Doct. Alexander took the fever; Mr. Bruce a young gentleman of the bar, having accompanied Doct. Davidson, on a visit to Doct. Alexander, took the infection and fell a victim to its deadly influence; Mrs. Davidson, two children and one servant, were all afflicted with it. Mr. Preston visited Major Helms in his sickness, he took the disorder to his lodgings, where next in order, Mr. Hoffman, with whom he lived, took the disease; Mr. Hoffman communicated it to Mr. Carleton, a negro man, his own servant and a negro woman. See Orleans Gazettee, July, 1817.

In the meanwhile the vessel which imported the infection was suffered to come up to the levee and lay along side the steamboat, where the survivors of the crew undoubtedly spread it; for several cases of fever appeared immediately in the vicinity.

I beg leave to state another instance, the same season of its importation, as extracted from the same paper. On the 18th of June, the British cutter *Phoenix* arrived from the Havanna, with a sickly crew; on the 30th of that month Dr. Kerr was called to attend four of her seamen who had the yellow fever, two of whom died on board.—This vessel was moored close to the steamboat "*Orleans*," to which the infection evidently made its way; for Dr. Kerr was called upon to attend the following persons, belonging to her:—first Mr. Norton, the master, who recovered, next Mr. Baker, the engineer, who died, next Townsend, whom he took to the military hospital, then Kirk, and finally, Capt. Lawrence himself, so that no one individual on board that boat escaped infection; prior to Townsend being taken to the military hospital, there had been no one case of malignant fever in that infirmary, but very shortly afterwards, not only other patients, and convalescents, but the steward and nearly all the attendants had the yellow fever, and many of them died; from thence it quickly spread to the garrison, in which it attacked every individual without exception, men, women and children! Vide Or. Gazette of Oct. 1817.

The British schooner "*Susan*," Capt. M'Gowan, arrived on the 19th of July from St. Thomas's without sickness on board; she lay near the steamboat, from whence captain M'Gowan took the yellow fever, as did also all the seamen who remained with him. Captain M'Gowan, and several others, when taken sick were removed to lodging houses, in various parts of the city, which occasioned the disease to spread in all directions.

At the time Mr. Baker, the engineer, was dying on board the steamboat with the black vomit, Mr. Meade, the partner of Mr. Spencer, went on board for some freight; he complained of sickness in a few days, and died of the same malady. Mr. Spencer was then attacked, next his wife, and four daughters, and lastly his clerk, who died.

Mrs. Kean and her clerk, who were in the habit of visiting Mr. Spencer's family, also caught the infection and the clerk died. Vide Or. Gazette.

A little attention to the foregoing facts, will conclusively shew, that persons engaged in the same pursuits, and exposed to the same atmosphere, were infected with the yellow fever, in the order as to time, that their communication with some diseased person was traced.

To shew that the spreading of the disease was not to be attributed altogether to the filth of the city (much as I desire to see a better police in all respects,) I must select one or two cases out of a great number, that occurred on the river, where the steamboats and barges called, and instances of healthy persons taking the disease from those infected, on the river itself. At Whitzell's landing, 15 or 20 miles below Natchez, where the steamboats usually take in fuel, the yellow fever, with all its characteristic symptoms, made its appearance and carried off a large proportion of the few inhabitants of the place.

Phillips' barge, which left town the same season for St. Francisville, began to lose her passengers and crew early on her voyage; to replace the latter, new hands were continually engaged, who all took the disease in succession, so it was with great difficulty the voyage was performed, and finally of the captain, crew and passengers, there does not now remain a single survivor. The owner of the barge (Mr. Stokes) having visited her at the landing place, paid the forfeit of his life.

I omit the numerous cases of yellow fever, which occurred at the Charity hospital, because of those who were attacked many were sent thither; the first case, however, was that of a seaman from a foreign port.

The last year, 1819, is admitted to have been every where, a most fatal year: perhaps it exhibited a state of atmosphere, and I believe it did in many parts of the country, sufficient to generate the yellow fever of itself; the legislature left a power in the hands of the governor to proclaim a mock quarantine, on vessels arriving from such ports, as he might learn were infected; but this proved totally ineffectual; as I learn patients died of the *black vomit* on board of Havanna vessels, opposite the city early in June, and his first proclamation was not issued until July; but even for this attention to the public safety, he was abused in the public papers; and vessels afterwards arrived from Martinique, which were known to have lost a great part of their crews. The disease soon afterwards assumed a new form, medicine lost its effect, and the skill of the physicians was baffled: cases of the highest malignity were abandoned, and soon multitudes were carried to the grave.

There is a common sense, practical view to be taken of this question and the efficacy of quarantine laws: numerous and filthy and populous and unhealthy as many of our inland towns are, the yellow fever has never been known in them, until the introduction of steam boats, which appear to have carried it to the most remote points of navigation. Need I appeal to the disastrous year of 1817, when for the first time, it made its ap-

pearance at Natchez, and according to the information of Mr. Lyman Harding, an intelligent gentleman of that city, I am informed it was distinctly traced to the steamboats.

The great mortality of the various crews of the steamboat Alabama, during the last summer, as well in port, as on every part of the river, in her progress up, is well known; men joining her many hundred miles above Natchez, were all infected.

The same fever, or one equally fatal, visited Natchez the last autumn, notwithstanding her quarantine laws: I perceive the governor of the state of Mississippi calls the attention of the legislature to preventive regulations: he ascribes it to some local improvements, which had the effect of creating ponds of water, contiguous to which, he says the fever first made its appearance. In the general *vitiating state of the air*, of the last season, I am not disposed to question, but it might have been of domestic origin; but the difficulty of enforcing any quarantine law effectually at Natchez, must be obvious to all acquainted with its position; for persons generally quit the boats they go up in previous to reaching the quarantine ground, and pursue the usual roads to the city. Contrast with this total exemption of all our inland towns the fact of every village, however well situated, or pure its air, with any direct foreign communication, and we find them at one time or other, visited by this pestilence: in support of this, we need only look at Savannah, St. Mary's, Pensacola and Mobile.

This latter town, the last season exhibits a bill of mortality for its population, unequalled in any of the plagues of Egypt.

It is true, the Bay of St. Louis and Pensacola, notwithstanding a daily intercourse with Mobile and New-Orleans, were exempt from this disease, except in some few cases, where persons had taken the infection elsewhere—yet this fact is not at all inconsistent with the principles I have advanced. The air at the latter places was not sufficiently *impure*, to propagate it: but it was not sufficiently pure to triumph over the operation of the *specific poison*, that had been imbibed elsewhere.

The air of the country, in many places during the last season, constituted a medium, sufficiently foul for its propagation. The sheriff of Iberville, a parish about 100 miles above New-Orleans, visited it in September, he returned home, in a few days was taken sick, and died of the *black vomit*; his neighbours, and several of his family who attended him, soon followed him, in like manner, and it is observed in the order which they had had communication with him: a change of air, or some other circumstance, prevented its extension beyond the original subjects exposed to it.

In the eastern cities, where they have the benefit of experience, as to quarantine laws, and where indeed they are less necessary, than in this city, what would be the popular clamour, were it proposed to repeal them? Shall we be less alive on this subject, who have seen whole families follow each other in rap-

id succession to the grave? Is it a principle of no consideration to the city that a large portion of its inhabitants should every year be banished from it for four months, or obliged to risk their lives in a place, inviting rather than repelling diseases from abroad; and unprotected by any measures of ordinary cleanliness or precaution, from those of indigenous or domestic growth? Is it not a serious matter of consideration that the city should for some months have sustained a loss of several hundred inhabitants per month, and a loss of property commensurate with the existence of the disease and the deaths which ensued, should have been incurred? It is of importance to the merchant—ship owner and passenger, that vessels bound from New-Orleans to any other port, should be relieved from the suspicions and inconvenience which constantly attend their arrival. A dog proclaimed to be mad in the streets, is not more sedulously avoided than a vessel arriving at certain seasons from New Orleans, in a foreign port.

I perceive by the newspapers received to-day, the legislature of Georgia, so fully impressed with the subject, have passed a law, providing for the prohibition of all intercourse between the town of Savannah and the country, when the yellow fever prevails in the former.

Thus we find those, many of whom deny its being contagious, like Imlac in *Rasselas*, speaking of the appearance of departed spirits, as uniformly, "*confess it by their fears.*"

These facts conclusively shew, that most generally, the yellow fever has been introduced amongst us from abroad; that on some occasions the atmosphere has given it wings to every part of the country; that upon others it has not been propagated; and the last season particularly, such was the general state of the atmosphere, as to act as fuel for lighting the disease, wherever infected persons were found—nor will I deny, but that it has in some instances been indigenous; yet the fact, that it may probably be generated by our own atmosphere, or defective police, should by no means be used as an argument against measures calculated to prevent its introduction from abroad.

It is said, there are sufficient causes to account for its existence, in the police of our city and the nature of our climate, and that it is unnecessary to search for secret or hidden causes, when the apparent causes suffice—this may be all true, and for one, I wish much to see the city improved in this particular, and I have no doubt its effect would be to remove many of the combining and predisposing causes—perhaps it would create a state of atmosphere in which the disease cannot be propagated, when its introduction from abroad would be harmless; but I should think the existence of these agents or causes should make us the more vigilant, in guarding against the pestilence which has rarely failed to call them into action.

The argument stands thus; we may possibly be afflicted with the yellow fever from domestic origin, we will not therefore provide against the certainty of it from abroad.—We have the

combustible materials, we will therefore not guard against the application of the torch.

So far as we may avail ourselves of example on this question, there we find the most beneficial effects resulting from quarantine regulations, as well in most of the civilized nations of Europe, as the United States. We find countries exempt from a desolating plague or pestilence in the vicinity of cities where it rages with violence, and we may assert with safety it is to the modern quarantine regulations of Europe, that we are to ascribe their being so rarely visited by that wide wasting pestilence, that formerly swept every thing before it.

In the Atlantic cities, we find, except in one or two instances, and those but partial, the complete efficacy of the regulations in question; until the adoption of quarantine regulations, the visitations of the fever were frequent—since, not oftener than once!—Witness the late measure in New-York, on its partial appearance in a particular quarter of the city, and the effect of it.

It is said, however, that the yellow fever is frequently in our southern cities, notwithstanding their quarantine regulations—this doubtless is the fact—and it may well be accounted for, upon the principles I have advanced—that it may sometimes be of domestic origin, and at all times, the predisposing causes of its propagation are greater than in the northern states; from the state of the atmosphere in Charleston, its partial introduction would soon render it general, whilst the last summer's experience in Boston shews, it was confined to those immediately connected with the infected persons or objects.

May we not attribute the total exemption of this city from disease in 1818, to the then existing quarantine law?

That all the apprehensions expressed by a quarantine law, are well founded, I beg leave to refer to the history and circumstances of the disease as it has appeared, at various times, in the United States; and here I shall make copious use of the able *observations* already referred to: The yellow fever which was introduced in Charleston in 1732, 39, 45 and 48, was spread with great celerity through the town; yet if any from the country received it in town, returned home and died, it spread no farther; but the country people were subject to it by inhaling the atmosphere of the city for the shortest time.

The fever which appeared in New York in 1791, is distinctly traced—It was introduced in a part of the town, thickly inhabited, its houses generally small and badly ventilated—here it raged a considerable time; it then began to spread, as some of the attendants on the sick lived in other neighbourhoods; by this means, it was carried to other families, and most generally could be traced to this source.

In the yellow fever of 1783, which was introduced into the city of Philadelphia from the West Indies, it is conceded by all, that the disease first made its appearance in Water street, and that all the cases of this fever, were for two or three weeks ev-

idently traced to this spot. It is also a fact well ascertained, that in the vicinity of the place where the infection was first received, the air was in a very offensive condition from a quantity of damaged coffee, which was exposed upon the dock, and under circumstances favourable to its putrefaction.—From that place the disease gradually infected a considerable part of the city—and in the language of Mr. Carey, it was “dreadfully destructive to the poor;” the inhabitants of dirty houses severely expiated their neglect of cleanliness and decency, by the number of them that fell victims to it.

As an evidence that the disease did not depend on a general condition of the atmosphere alone, it is remarked that whilst this formidable disease was making such ravages in the city, the country for some miles around was never more healthy.

May we not here suggest that but for the damaged coffee, to which Dr. Rush, as I think erroneously, attributes the disease, and its consequent effect upon the atmosphere, its importation on that occasion might have been innoxious? If then, with us such cases are admitted to exist, does it not shew the greater necessity to prevent their being so fatally called into action.

Similar facts are recorded of the visitation which New York experienced of the same disease in the year 1795—In that year the disease appeared upon the east side of the city, first affecting some seamen, who had received the infection from a brig directly from Port-au-Prince, from thence it spread to the most dirty part of the town, and was confined throughout, to that part of the town, where the local condition of the atmosphere was peculiarly favourable for its diffusion, for there was not only a great accumulation of filth in that part of the town, but at that very time a great number of emigrant poor had arrived from England, Scotland and Ireland, so that the lodging houses in that neighbourhood were unusually crowded; and to this, the moist and very warm weather, particularly calculated to spread the infection.

In 1798, New-York was again visited by this scourge of our seaport towns; during the months of August, September and October, about 2,000 persons fell victims to this disease, at the end of which time a keen frost put an almost instantaneous termination to its progress. The disease as in former years, was introduced from the West Indies; after cutting off several persons, in the neighbourhood in which it commenced, the same vessel was removed to another part of the town, from whence the disease was communicated by those who worked on board to a thick settled and dirty part of the town, contiguous, inhabited by the poor.

An opinion prevailed that the yellow fever of this season originated from some spoiled beef; but that it did not derive its origin from the spoiled beef, is evident; not only from the fact that the disease had already previously appeared in other parts of the town, but that the tainted provisions, unaccompanied with

the specific poison of the disease, did not of themselves communicate infection to those who were constantly exposed to their effluvia. The inspector general of beef, at that time, says, that of forty persons whom he had employed in examining the beef, and in removing and emptying such barrels as were found in a putrid state, not one was taken ill of the yellow fever. But Dr. Chisholm and Dr. Stewart have abundantly shewn, that decomposed animal or vegetable matter, will not of themselves produce the pestilence; and that this disease is generated in the human system, and communicable from one person to another, by a peculiar secretion from the morbid body. They further prove, that when such virus is introduced into a certain state of atmosphere, the disease is readily contracted, but that beyond that atmosphere it is rarely infectious.

It is a fact and not to be questioned, that instances of yellow fever, as well as of the plague and dysentery, have been occasionally infectious, even in the more pure air of the country, though it is acknowledged such instances are of rare occurrence.

It is remarked by Dr. Rush, that out of upwards of one thousand persons who carried this disease into the country, there were not more than three or four instances of its being propagated by contagion. Such instances are related however by Dr. Spalding, as having occurred in New-Hampshire. In Connecticut and on Staten Island, as stated by Dr. Moore; and at Germantown in the vicinity of Philadelphia, as related by Dr. Wistar. In the present state of medical knowledge, to use the emphatical language of the Edinburgh Reviewers on this subject, "it would not be at all more absurd to deny the existence of fever altogether, than to maintain that it was not propagated by contagion." But in the language which Dr. Mead has applied to the plague, we may say of all the diseases of this class, "that a corrupted state of the air is without doubt necessary to give these contagious atoms their full force."

If it were necessary, I could cite every return of the yellow fever with which the United States have been visited, to shew that the progress of the pestilential poison has ever been commensurate with the impurities of the atmosphere: it is probably owing to this impure condition of the atmosphere, that the various fevers and the greater mortality of diseases in general are to be ascribed, which physicians have frequently observed to precede pestilential disorders, and to announce their approach, and which have led many to conclude that the pestilence itself was thus engendered by local circumstances and not imported.—Facts of this nature have served to mislead persons, who thus confound the *existing* and *predisposing* causes of disease; who do not discriminate between the inflammable materials and the spark that lights the flame, but have identified the domestic circumstances which have served to diffuse the poison of yellow fever, with the peculiar virus itself, by which that disease has been introduced into the various cities of the United States.

The facts adduced go conclusively to shew that yellow fever requires an impure state of the air to diffuse and multiply itself; and that those most accustomed to the impure air of the place in which the disease prevails, are least susceptible of the disorder.

The well known fact relative to the communication of Jail fever to the judges, presiding at the Black Assizes, in 1557, and a similar infection being communicated to the judges on the bench, and other persons present, at the sessions held at the Old Bailey, in 1750, while the prisoners themselves remained in health, insensible to the infection; furnish incontestable evidence of the effect of habit in diminishing the sensibility to the poison of fever. It has been exemplified in the city of New-Orleans, that those who were least accustomed to the impure air of the city, were uniformly observed to be most susceptible of the contagion; those too, who enjoyed the most vigorous health and the most robust constitutions; the reverse of that condition of body which would be the effect of a residence in an impure air, were more readily infected upon coming into an atmosphere impregnated with the contagion, than those who had remained constantly exposed to its influence. In this manner we account for the greater number of victims amongst those from the upper country, and the many deaths, which occurred, by the premature return of the inhabitants of the city from the Bay of St. Louis, in the autumn of 1817. It is also remarked in the West-Indies, that the sailors, soldiers, and young men recently arrived from Europe, and least accustomed to the climate, are more obnoxious to it than others.

That the active exertions of a vigilant police are sufficient to keep it down, is exemplified in the fact of its raging with violence in 1809 in Brooklyn, whilst the city of New-York, separated only by East river, remained unaffected. The same disorder, owing to local circumstances, spread in the vicinity of those places on Long-Island, where it had first appeared.

During the year 1811, the yellow fever was also introduced into Amboy, New-Jersey, from the Havanna, but did not spread beyond those persons who were first attacked, in consequence of their immediate exposure to the air of the infected vessel. It is remarked by a medical writer, that the local circumstances of Amboy, its dry and sandy soil, its wide streets and spacious houses, their distance from each other, and the remarkable cleanliness of the town, most satisfactorily account for the sudden extinction of the disease, while the evidence of its importation must be admitted to be conclusive.

There is another circumstance, which particularly merits attention, in every epidemic visitation of the yellow fever: Several days, viz. from eight to twelve or fourteen, have generally elapsed, from the appearance of the first cases of fever, and the communication of it to other persons, even in the same neigh-

borhood; hence those are stigmatized as *alarmists* who first announce the deadly visitor.

Sir Gilbert Blane, M. D. in a letter to the Hon. Rufus King, then our minister at the court of St. James, in examining the question, whether the yellow fever be infectious, and under what circumstances, remarks, that "there was the most incontestable evidence of this, both on board of ships and hospitals, and that the doubts which had been started, seem to have arisen from the operation of infection being blended with that of other causes, which must concur with it in order to give it effect."

He adds, "that in May, 1795, the *Thetis* and *Hussar* frigates, captured two French armed vessels from Guadaloupe, on the coast of America; one of these had the yellow fever on board, and out of fourteen men, sent from the *Hussar* to take care of her, nine died of the same fever, before she reached Halifax, and the five others were sent to the hospital, sick of the same distemper: part of the prisoners were removed to the *Hussar*, and although care was taken to guard against the infection, it spread rapidly, so that the whole crew were more or less affected by it." This fact carries a conviction of the reality of infection, as irresistible as volumes of argument; and it affords matter of important and instructive information, by proving that the infection may be conveyed by the persons or clothes of men, in health.

The disease imported during the last summer into Boston, by a vessel from the Coast of Africa, was distinctly traced to the consignees of the goods brought by the same vessel.

The following is an extract on this subject of a letter from the late Dr. Samuel Smith, president of Princeton College: "I have no doubt that the yellow fever contains a specific contagion. It requires a certain state of the atmosphere as a conductor, in order to impart it. In the pure atmosphere of the country, the poison is commonly so diluted, that it is too weak to excite the fever, except under peculiar circumstances. In every instance, in which the yellow fever has been introduced into Philadelphia, one circumstance has invariably taken place: After the persons who have first taken the disease, have either died or recovered, there has been an *interval of health* for several days, from ten to thirteen, or fourteen, before the alarm has been renewed. From this circumstance I have concluded, that during that space of time, the infection secretly works in the blood before it appears in fever."

In the official document of the Board of Health of New-York, published in Sept. 1805, they thus addressed the inhabitants:

"The Board have formed a decided opinion, that the principal seat of the prevailing disease (the malignant epidemic fever), is that part of the city, included between Burling slip and Old slip: almost all the cases of disease which have occurred, can be distinctly traced to that part of the city. They conceive it their duty to enjoin upon their fellow-citizens to remove immediately." This advice was followed, as it was during last sum-

mer, and its effect in checking totally the disease, we are informed of.—Proofs of the same kind might be taken from the most authentic accounts of the yellow fever, as it has prevailed at other seasons and in other cities and seaports of the United States—proofs wholly irreconcilable with the opinions of those who have declared that the malignant yellow fever arises at “distant and unconnected points.”

According to Dr. Francis, the professor of the Institutes of Medicine in the University of New-York, and Dr. Pym, who had the advantage of seeing the disease, as well in Europe as the West Indies, the yellow fever attacks the human frame but once.

According to the latter, in the yellow fever at Gibraltar, during the years 1810, 1813 and 1814, there was no well authenticated instance of a second attack; and this fact was so well authenticated, that in the year 1815, all the troops who had not passed the disease, were encamped, whilst those who had passed it were doing duty in town. At Cadiz, Carthage and Malaga, the fact of persons not being liable to a second attack of this disease, is considered to be as firmly established as it is in the small-pox.

Two British regiments returned to the West Indies in the year 1800, which had been there in the year 1794, filled up with new officers—all who had had the fever at a former period in the West Indies, now escaped; such as had not, generally died.

The British officers who had had the disease in the West Indies were exempt from it at Gibraltar; whilst all were affected, who had not passed it in the West Indies. The Spaniards are so fully convinced that they cannot have the disease a second time, that having passed it, is a matter of great rejoicing amongst them; and a medical certificate of the fact, is a sufficient passport to an infected town, which they enter without the smallest apprehension.

In the facts and observations of the College of Physicians in Philadelphia, on the nature and origin of the pestilential fever, after establishing the identity of the yellow fever, which appeared in that city in 1793, 1797 and 1798, with the West-India pestilence,—the College state, “that very few, if any, of the creole French in this city suffered from the disease of those years, though the fever was introduced into their families; and children born in this country died with it, while the parents and children born in the West Indies were exempt from it.”

According to Dr. Rush, in the fever of 1793, the refugees from the West Indies “universally escaped the disorder.” May I not add to this, the fact, that in the desolating fever of the last summer in this city, not more than two or three of the old inhabitants were affected with it, whilst not more than that number of the emigrants escaped.

Dr. Francis adds, “that the decisions of the Royal College of Physicians of London, and of the Army Medical Board, two learned bodies, alike distinguished for scientific attainment and practical knowledge, have pronounced that it is a “highly contagious disease.” The same bodies further add, that the operation of climate, soil, and other local causes in adding to its viru-

lence, and propagating the disease, may be considered almost an axiom in physic. And they recommend a strict adherence to an improved system of quarantine laws, and all municipal regulations, for the purpose of domestic cleanliness.

I have met with the following narrative of Dr. Pym, the inspector of hospitals; upon the bulam, or yellow fever, in the *Edinburgh Medical and Surgical Journal*. I beg leave to extract from it the following facts, going to show that the yellow fever is contagious, and that persons are not subject to a second attack of it:

“In 1801, the yellow fever appeared at Medina, Sidonia, but soon ceased, and extended no further.

“Toward the end of August, 1803, it broke out in Malaga, and carried off great numbers. It declined as usual in the month of December, but only to burst forth with increased virulence early in the summer of the following year, and, upon this occasion, it extended its ravages in every direction. The cities of Cordova, Granada, Velez, Malaga, Carthage, and Alicant, on the east side of Spain; Antequera, Cadiz, and the towns on the west side, as far as Ayamonte, were severally attacked. It also affected Leghorn, but no other part of Italy, and the lofty fortress of Penon de Velez on the north west of Africa. At last our own fortress of Gibraltar was doomed to suffer severely, and the 28th of August, 1804, is fixed upon as the day when the first case occurred. With the approach of the cold weather, it once more ceased all over Spain for some years.

“In 1810, Cadiz was once more attacked, about the 11th of September; great mortality from the ship or jail fever having taken place in the early part of the year among the French prisoners of Dupont’s army confined on board hulks. This year it was confined within the walls of Cadiz, on this side of the Peninsula, and even spared the Isla de Leon, to which the British troops had been removed on the first intelligence of the disease having reappeared; but it prevailed at Carthage, and slightly at Gibraltar; and about the 16th or 18th of October, in the distant island of Teneriffe, but did not extend to any other part of the Canaries.

“The kingdom of Murcia continued to suffer in 1811, when the rest of Spain was healthy.

“Early in September, 1813, the last peninsular epidemic which we hope it will be our duty to record, began in Cadiz, from whence it spread to Port St. Mary’s, and several other places, to which the emigrants from Cadiz retired. Gibraltar was also visited by it this season.

“When we carefully consider this chronological notice of the epidemics of the peninsula, which it has cost us some trouble to extract from the publications of Sir James Fellowes and Mr. Pym, and trace their progress upon the map, connected with the local circumstances of the places, whether infected or healthy, it seems to us impossible to account for its progress upon any general principle of peculiarity of local circumstances, or atmospheric influence, independent of contagion.

"The third general argument, and one perhaps still more conclusive, is derived from the effect of quarantine and seclusion, in preserving places or individuals from the disease when it was prevalent, and of separation of the sick in putting a stop to its further progress. Sir James Fellowes's Reports abound with the most striking proofs of this fact, and to them we must refer our readers. We shall only extract one or two.

"When it prevailed in Murcia, in 1811, the French drew a cordon of troops around the infected district, and it did not extend beyond it. In 1810 and 1813, when the French occupied Malaga, and had little communication with the surrounding country, Malaga remained healthy. Many cities, as Aguilar, Xeres, (p. 291,) remained free from the disease, while it extended to others much more remote, where no precautions were taken. Even in infected towns, those who avoided communication with the diseased escaped, as exemplified in the case of the convicts in Cadiz, and of the workmen in the dock-yard at Gibraltar.

"The last argument is the counterpart of the former, the numerous proofs of its being directly conveyed or communicated by personal intercourse, when no other circumstance seemed to favour its propagation. Of this it is sufficient to notice its appearance in 1804, in the fortress of Penon de Velez, on the northern shore of Barbary, distant in regard to situation, receiving all its supplies from Malaga, while no other part of Barbary suffered from it. The instances in individuals, adduced by Sir James, are very numerous and striking.

"We have entered much more at length than we intended into the proofs of the contagious nature of this disease, because we consider the establishment or refutation of that point to be of the very greatest practical importance.

"Sir James also confirms, by many instances, the curious fact which we first learned from Mr. Pym, but which seems to have been observed very soon by the Spanish physicians, that this disease attacks persons but once in their life."

From these facts, I feel warranted in concluding, with the medical institutions, I have before mentioned, that an impure atmosphere is indispensably necessary to multiply and extend the specific poison, constituting yellow fever. That the impurities of the atmosphere do not produce their effects by increasing the susceptibility of the system to be acted upon by the peculiar virus of those diseases: the reverse being the fact, the predisposition of those who are most exposed to such air, being less than those who reside in the pure atmosphere of the country.

That the impurities of the atmosphere are fermentable materials, to be called into action by the specific ferment of those diseases, aided by heat, moisture, &c. and that as far as such atmosphere extends and the circumstances favourable to such fermentative or assimilating process continue, so far those diseases become epidemic, but no further.

If the view which has been taken of this subject be correct,

a still more important truth is the result ; that while by a rigid and well executed system of quarantine laws, we have it in our power to guard against the introduction of the spark that kindles the flame, we are also enabled by means of domestic cleanliness and ventilation to extinguish it when introduced. For this purpose our magistrates and guardians of the public health cannot be too attentive in their police regulations, to have all noxious materials removed from our streets and our dwellings ; and at the same time that they are ornamenting our city by the erection of buildings and the introduction of improvements, they should also avail themselves of every opportunity of *draining the city* and widening the streets, and reserving squares and other pieces of ground to be forever kept vacant, as amongst the most effectual means of preserving the health of our citizens, and guarding against the propagation of contagious diseases. “Best is Pelasgie empty,” was wisely expressed by the Pythian oracle ; thereby denoting that every large and populous city should have its vacant pieces of ground, as so many reservoirs of pure air for the purpose of counteracting the effects of contagion when introduced.

It has been objected to a quarantine law, on the score of the expense attending it. Admitting for a moment it would conduce to the health of the city, with such as place human life in competition with the expense of preserving it, all this reasoning and the foregoing facts tending to indicate the proper measures to be adopted to this end, are unnecessary.

But it is within the power of the Legislature to provide the means, without imposing a tax either upon the people of the state generally, or the city. By the 10th section of the first article of the constitution of the United States, the state can, with the consent of Congress, lay a duty upon tonnage or imposts on exports, for this purpose. The states of New-York and Pennsylvania have resorted to these means for defraying the expense of their quarantine regulations, and by subsequent resolutions of Congress they have been approved of. Vide Laws U. S. From the security from disease, it would insure to the shipping in port, and the inducements with others, at all seasons to visit our port, would not foreign and domestic shipping be a peculiarly fit object of taxation for this purpose ? That such a tax will be sanctioned by Congress—the importance of this city to a large portion of the United States, the hundreds of victims from the western country to disease, that may probably thereby be prevented—is a sufficient security.

By a proper organization of the officers to enforce a quarantine law, and a limitation as to the period of the year when they are to be employed, the expense will be too trivial to be brought into the estimate, in any regulation which may be adopted.

I shall close this communication by the following extract of a letter, showing its ravages during the last year in Cadiz, and the manner of its introduction,—and the following judicious remarks on the yellow fever, which appeared in the New-York Evening

Post, and copied afterwards in the Orleans Gazette in Oct. 1819. The letter from Cadiz, speaking of the sailing of the transports from thence, says, "the fever is on board, but some of the captains have broken the salutary regulations of confinement, to which they were subjected, and fled: this disorder came in a vessel from Havanna; the lading was treasure, and the avidity or famine of the Spanish government was too ravenous to await the usual period of quarantine."

From the New-York Evening Post.

We are now to dispose of the long agitated question, "*Is the yellow fever a contagious disease?*" I confidently take the affirmative of this question, and give me but a patient and candid attention, and I venture to promise that complete conviction shall be brought home to every fair mind, open to the reception of truth.

The principal cause of the controversies, both among physicians and others who have written and spoken on this subject, has been owing to the loose and ambiguous manner of using certain words. "As the end of language is the communication of thought, it is self-evident, that there can be no such thing as correct reasoning, unless the same import be annexed to the same words, in the oral and written intercourse of mankind. A large proportion of all the false reasoning and controversy, which has existed among the learned and unlearned of all ages, has arisen from the want of a precise definition of words. The most valuable parts of the writings of Locke, are those which relate to the abuse of language. None of the departments of practical knowledge have suffered more than medicine, from ambiguous phrases." Of this truth, the subject now immediately before us furnishes the most striking illustration. So much so, that merely to define a few words and phrases, will, of itself, almost dispose of the dispute. I ask, then, first, what is meant by *yellow fever*; and, secondly, what by *contagion*? On these two questions, I shall avail myself of several detached passages in the profound and elegant work entitled "*Elements of Medical Logic*."

"In order to treat this subject intelligibly, (says he,) it is necessary to remind the reader, that there are three sorts of remote causes of fever, in whatever climate they may arise. One class of these causes is the exhalations of the soil, producing intermittent and remittent fevers.

"The second class of occasional causes, is vitiated *human effluvia*, generated by the living body, under circumstances of filth, want of ventilation, and change of apparel, aggravated occasionally by scanty and unwholesome food, as exemplified in the jail, hospital and ship fever, and that of the indigent part of the population: and all pestilential epidemics seem to have had a similar origin, diversified according to circumstances not always definable or ascertainable.

"The third class consists of that disturbance of the system, occasioned by fatigue, insolation, intemperance, the privation of food and sleep, sudden alternation of heat and cold, acting either jointly or singly in creating fever.

"Of these three, the second only is found to be contagious.

"They are all three found to exist in the West-Indies, (by which is meant the islands called the Antilles, and the adjacent coast of America,) in common with other countries.

"But in conformity to what has been said regarding the irregularity of the *phenomena* of infection, there are found to be peculiar and unaccountable circumstances relative to it on this station, (the West-Indies,) for the fevers originate from these three causes, are all accompanied with a yellow colour of the skin, which being a conspicuous symptom, has procured for them all the appellation of *yellow fever*, give occasion to great confusion and serious mistakes."

"It seems to be a general rule, that no *effluvia*, emanating from corrupted dead matter, even in a state of the rankest putrefaction, ever produce a fever of a contagious nature. It is presumable, therefore, when any exhalations do produce contagious fevers, that those exhalations consist, in part at least, of the vitiated effluvia, generated by the living human body, constituting some form of typhus morbidic poison.

"In order to give that precision to language which is necessary on every subject, and with a view to avoid misconception and wrangling, let these three classes of fevers be designated as follows: let the first be called the *endemic*, the second the *pestilential*, and the third the *sporadic*.

"All the three are, in vague and vulgar language, styled the *yellow fever*, and the utmost confusion has arisen in treating of them, as must ever be the case, when one author or disputant means one thing, and the other a different thing. It has accordingly been from want of precision, in naming and classing these fevers, that controversies highly unbecoming a liberal profession, and what is infinitely more unfortunate, errors of the most fatal practical tendency have been engendered by this confusion and ambiguity of terms.

"In strenuously maintaining, as some writers do, that the *endemic* yellow fever, [like that which appears annually in our southern states, at Charleston, S. C. New-Orleans, &c.] is not contagious, they are fighting phantoms of their own creation; for no rational advocate of contagion has ever alleged that fever of this kind is contagious. The shallow and perverted reasoning of these authors would not have even deserved notice, but, as what they give to the world may prove mischievous, by some inexperienced or weak practioner's applying what is advanced by them, to the pestilential epidemic fever, it has become the duty of one who has been nearly forty years in the medical service of this state, to counteract the baneful impression it may make by stating the above distinction, and he seizes this opportunity of doing it."

We have not room nor time to follow the able author, through a long course of strong and conclusive reasoning to show that the pestilential yellow fever is a specific disease entirely distinct from those fevers that are occasioned by exhalations of the soil, or from those by sudden alternations of heat and cold, &c. &c.

Such is the fever of which we are now treating; such is the disease which the people of the United States, both learned and unlearned, mean, when they speak of the *yellow fever*.

We now come to consider whether it is a *contagious disease*? By this phrase I mean simply that disease which is *communicable, according to laws peculiar to itself*, and this is an essential part of the definition. Those, however, who maintain that the pestilential fever is not contagious, reject this, and are compelled to do so, or abandon at once, as untenable, the ground they have taken. They begin by defining a contagious disease to be only that which may be conveyed from one person to another, with equal certainty, under all circumstances, in all climates and seasons, and that can affect such persons but once; as small pox and measles. But the objection to this definition is, that it is not strictly applicable to any disease ever known; such a disease would, indeed, be destructive of the human species itself. Nor is it applicable to the two diseases they mention. In a pamphlet entitled "*Lynd on diseases*," we find it recorded, that the small pox broke out on board the Royal George, in the year 1759, and that out of her crew consisting of 880 men, four or five died of it, and nearly one hundred of those who never had it, escaped the contagion altogether. It would be much nearer the truth then, to say, that no two contagious diseases are governed by precisely the same laws. Small pox, measles, and the Levant plague, for instance, are communicable both by the touch as well as by the effluvia and breath; the whooping cough and several species of fevers, by the latter only, while the itch, syphilis and hydrophobia are only conveyed by contact. Every contagious disease, therefore, may be said to have a law of its own, and the yellow fever among the rest. This disease, if we are to judge from facts, the only safe guide, requires, first, an impure atmosphere; second, what the physicians call a predisposition in the person receiving it. Without a union of these two circumstances, the yellow fever is *not contagious*. With them it certainly is. Consistently with this definition we account for the case that has been mentioned in the newspapers, and alluded to in the proclamation of the Board of Health at Boston, of a nurse sleeping in the same bed with her patient, and yet not taking the disease; and for the instance mentioned by the editor of the Baltimore Morning Chronicle, of attending upon a friend ill of the yellow fever, and yet escaping it. But to draw the conclusion from these two isolated facts, that the yellow fever is *not a contagious disease*, is not a legitimate deduction from the premises. The impure air and the predisposition were wanting. To prove that the yellow fever is, under the requisite circumstances, a contagious disease, produced by vitiated human effluvia, a single well authenticated case, from a multitude of similar instances, which might be enumerated, shall be mentioned here; as I find it recorded in the *Elements of Logic*, p. 159.

"A French ship of war, in 1815, on board of which the yellow fever prevailed, both at St. Domingo, before she left port, and on her passage to Brest, fell in with, and made a prize of a merchant ship from the Mediterranean, off Cape Finisterre; and

having, without shifting the prisoners, sent a party on board to navigate her, the crew of the healthy vessel caught the fever of them, and almost all of them died of it." Here, then, by a rare accident, is afforded positive proof of the fact, that vitiated human effluvia, without the aid or concurrence of infected air, communicated the same disease, *yellow fever*, to the well. Every possibility of evasion or cavilling is cut off. Part of the crew of the capturing ship were conveyed among the crew of the ship captured, who were in health, and gave them the disease, which proved fatal to almost the whole.

I conclude with the following sensible remarks on the difference between physicians on this subject, from Sir Gilbert Blane :

"Every one acquainted with human nature, knows how difficult it is for the mind to extricate itself from the shackles of prejudice, when rivetted, not only by time and habit, but by that pride of opinion which confirms and perpetuates self-delusion, in opposition to the clearest evidence. But it is the duty of every liberal and considerate man to observe forbearance and to judge with indulgence of weaknesses from which none of us are exempt. Gentlemen, whom I know to be men, not only of the greatest integrity and honour, but of superior attainments, have advocated the cause of non-contagion, *bona fide*, and with intentions as pure as those of the opposite opinion. Nor is it easily conceivable, that any set of men, far less those of the medical profession, can be otherwise than sincere, or that they can mean positive mischief. If there have been persons who have stooped to the suppression or fabrication of facts, as has been alleged, I should not impute even this conduct to bad intentions, but to that misguided conscience, which by a perverted casuistry, deems pious frauds justifiable, and holds that a *little evil* may fairly be done, that a *great good* may come of it.

"The errors we have been adverting to, have arisen, in the first instance, from the want of sufficiently comprehensive knowledge of the subject. It was viewed on a local, partial and narrow scale, instead of being surveyed in its whole extent and various bearings. In America, during the last years of the last century, the majority of opinions were in favour of non-contagion, and even medical bodies gave their opinion on this side ; but in the year 1805, the College of Physicians of Philadelphia, as a body, gave their opinion in favour of contagion, asserting that the evidence of this was as strong as for that of the plague. Such is the meliorating and maturing influence of time. The College of Physicians of London, have given their verdict on the same side."

The question seems now to be brought to such a point, that we may venture to challenge any candid, intelligent and unbiased man, whether in or out of the profession, to open his eyes and deny that this disease is contagious ; if it be not, then has the author of this discussion lost every other faculty of distinguishing truth from error, of discerning light from darkness.

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